CLAIMS:
What is claimed is:

1. An apparatus for optimizing processing of graphics data, the apparatus comprising:

a plurality of logic units, wherein the plurality of logic units are used to perform a graphics operation in which a set of constants is required for the graphics operation;

a first set of connections connecting the plurality of logic units to each other, wherein the first set of connections are used to configure the plurality of logic units to determine the set of constants; and

a second set of connections connecting the plurality of logic units, wherein the second set of connections configure the plurality of logic units to perform the graphics operation in which the graphics operation using the constants is determined through the first set of connections.

2. The apparatus of claim 1, wherein the first set of connections and the second set of connections include common connections.

3. The apparatus of claim 1, wherein the graphics operation is a generation of a fog factor.

4. The apparatus of claim 1, wherein the graphics operation is a viewport transformation.

5. The apparatus of claim 1, wherein the constants are stored in a memory.

6. The apparatus of claim 1, wherein the constants are stored in a set of registers.

7. The apparatus of claim 1, wherein the apparatus is a graphics adapter.

8. The apparatus of claim 1 further comprising:

a storage unit, wherein the set of constants are stored in the storage unit such that redetermination of the set of constants for subsequent graphics operations is unnecessary until the set of constants change.

9. The apparatus of claim 8, wherein the storage is a set of registers.

10. A graphics pipeline comprising:

an input, wherein the input receives graphics data;

an output, wherein the output transmits processed graphics data; and

a plurality of stages, wherein a first stage within the plurality of stages is connected to the input and a last stage within the plurality of stages is connected to the output, wherein a selected stage within the plurality of stages includes a plurality of modes of operation including:

a first mode of operation in which the selected stage is configured to determine constants for use in performing a graphics operation; and

a second mode of operation in which the selected stage is configured to perform the graphics

operation using the constants.

11. The graphics pipeline of claim 10, wherein the constants are stored in a storage device.

12. The graphics pipeline of claim 11, wherein the storage device is a set of registers.

13. The graphics pipeline of claim 10, wherein the selected stage is a fog factor generation unit.

14. The graphics pipeline of claim 10, wherein the selected stage is a viewport transformation unit.

15. The graphics pipeline of claim 10, wherein the output is connected to a raster engine.

16. The graphics pipeline of claim 15, wherein the input is connected to the raster engine.

17. The graphics pipeline of claim 16, wherein the input and the output are located in a raster interface unit.

18. The graphics pipeline of claim 10, wherein the selected stage includes comprising:

a storage unit, wherein the constants determined in the first mode of operation are stored in the storage unit such that redetermination of the constants for subsequent performance of the graphics operation is unnecessary until the set of constants change.

19. A method for optimizing graphics processing functions in a data processing system, the method comprising:

identifying a variable from a set of variables for an equation, wherein an operation using the equation is to be implemented in a processing element and wherein the variable remains constant for a period of time;

reducing the set of variables by the variable in the equation to form a simplified equation, wherein the variable is treated as a constant; and

selecting a set of logic elements for the processing element, wherein the logic elements are used to both determine the constant and to perform the operation using the simplified equation.

20. The method of claim 19, wherein the operation is a generation of a fog factor.

21. The method of claim 19, wherein the operation is a viewport transformation.

22. A graphics adapter comprising:

an input configured to receive graphics data;

a frame buffer, wherein processed graphics data is stored for display;

a raster engine connected to the input and to the frame buffer, wherein the raster engine rasterizes the processed graphics data for display,

a geometry engine connected to the raster engine, wherein the geometry engine receives graphics data from the raster engine, processes the graphics data to form

the processed graphics data, and returns the processed graphics data to the raster engine and wherein the geometry engine includes a set of processing elements in which at least one processing element within the set of processing elements includes a set of logic units, in which the set of logic units is used to perform an operation on the graphics data using an equation and wherein a portion of the set of logic units is used to determine at least one constant for the equation used in the operation.

23. The graphics adapter of claim 22, wherein the at least one processing element includes a storage to store the constant determined by the portion of the set of logic units such that redetermination of the at least one constant for additional operations on other graphics data is unnecessary until the at least one constant changes.

24. A data processing system for optimizing graphics processing functions, the data processing system comprising:

identifying means for identifying a variable from a set of variables for an equation, wherein an operation using the equation is to be implemented in a processing element and wherein the variable remains constant for a period of time;

reducing means for reducing the set of variables by the variable in the equation to form a simplified equation, wherein the variable is treated as a constant; and

selecting means for selecting a set of logic

elements for the processing element, wherein the logic elements are used to both determine the constant and to perform the operation using the simplified equation.

25. The data processing system of claim 24, wherein the operation is a generation of a fog factor.

26. The data processing system of claim 24, wherein the operation is a viewport transformation.

27. A computer program product in a computer readable medium for optimizing graphics processing functions in a data processing system, the computer program product comprising:

first instructions for identifying a variable from a set of variables for an equation, wherein an operation using the equation is to be implemented in a processing element and wherein the variable remains constant for a period of time;

second instructions for reducing the set of variables by the variable in the equation to form a simplified equation, wherein the variable is treated as a constant; and

third instructions for selecting a set of logic elements for the processing element, wherein the logic elements are used to both determine the constant and to perform the operation using the simplified equation.